



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Alexander Wayne Hietala

Filed: 06/12/2001

Serial Number: 09/879,806

For: **FRACTIONAL-N DIGITAL MODULATION WITH ANALOG IQ  
INTERFACE**

Examiner: Perilla, Jason M.

Group: 2634

Mail Stop Issue Fee  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

SUBMISSION OF ISSUE FEE

In accordance with the Notice of Allowance and Issue Fee Due dated August 15, 2005, we herewith transmit the issue and publication fees for the above-identified application. The drawings are submitted under separate cover.

Respectfully Submitted,

Benjamin S. Withrow  
Reg. No. 40,876

**Withrow & Terranova, P.L.L.C.**

Customer No. 27820

P.O. Box 1287

Cary, NC 27512

(919) 654-4520

Date: October 27, 2005

File No: 2867-127

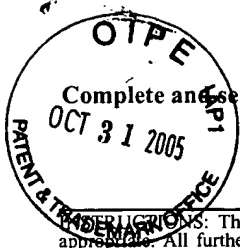
CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING  
DEPOSITED WITH THE UNITED STATES POSTAL  
SERVICE AS FIRST-CLASS MAIL, IN AN ENVELOPE  
ADDRESSED TO: MAIL STOP ISSUE FEE,  
COMMISSIONER FOR PATENTS, PO BOX 1450,  
ALEXANDRIA, VA 22313-1450, ON 10/27/05 (Date of  
Deposit)

Jennifer Alkove  
Name of Depositor

Jennifer Alkove  
Signature

October 27, 2005  
Date of Signature



## PART B - FEE(S) TRANSMITTAL

Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571) 273-2885

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

27820 7590 08/15/2005

WITHROW & TERRANOVA, P.L.L.C.

P.O. BOX 1287

CARY, NC 27512

11/01/2005 BASFAME 00000003 09879806

01 FC:1501  
02 FC:1504

1400.00 DP  
300.00 DP

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Jennifer Alkove (Depositor's name)  
Jennifer Alkove (Signature)  
October 27, 2005 (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,806	06/12/2001	Alex Wayne Hietala	2867-127	3717

TITLE OF INVENTION: FRACTIONAL-N DIGITAL MODULATION WITH ANALOG IQ INTERFACE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	11/15/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
PERILLA, JASON M	2638	375-295000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

WITHROW & TERRANOVA, PLLC

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

RF MICRO DEVICES, INC.

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

GREENSBORO, NC

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee  
☒ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.  
☒ Payment by credit card. Form PTO-2038 is attached.  
☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 50-1732 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Typed or printed name

BENJAMIN S. WITHROW

Date

10/27/05

Registration No.

40,876

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.